

REMARKS/ARGUMENTS

A copy of a previously submitted Declaration and Power of Attorney is enclosed as per the Detailed Action.

Amendments

The Applicants have amended claims 1, 5, 6, 8, 10, and 13-16. Accordingly, claims 1-16 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 112

Claim 6 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The antecedent basis and incorrect claim dependence has been corrected.

Claim Rejections – 35 U.S.C. § 102(e)

Claims 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,091,953 issued to Ho *et al.* (hereinafter Ho). The Applicant respectfully traverses the rejection of these claims.

13. (Currently Amended) A media gateway selection node for use in a telecommunications network for providing non-dedicated circuit pathways between access nodes and switches of a switch pool in the network, comprising:

means for storing and accessing data concerning media gateways, access nodes, switches, and circuit pathways of the network;

means for defining relationships among the media gateways, access nodes, switches, and circuit pathways; and

means for reserving and releasing circuit pathways as needed for use between individual switches and individual access nodes, wherein the means for reserving and releasing the circuit pathways is configured for:

selecting a media gateway;

allocating a circuit pathway between a switch and a target access node, wherein said allocating step comprises:

allocating a non-dedicated circuit pathway between the switch and the selected media gateway;
allocating a non-dedicated circuit pathway between the selected media gateway and the target access node; and
subsequently de-allocating each allocated circuit pathway between the switch and the target access node. (emphasis added)

The present invention discloses a solution for utilizing non-dedicated circuits between Base Station Controllers (BSCs) and a Mobile Station Controller (MSC) pool in a network having a plurality of gateways (Page 3, para 6). The Applicant's invention discloses a Media Gateway Selection Node (MGWSN) for connecting the BSCs and MSCs via non-dedicated circuits. The MGWSN provides a central means for pooling and controlling circuits in the core network so no dedicated circuits are required between the BSCs and MSCs.

The Ho reference appears to disclose a communication system for distributing signaling messages in a scalable wireless network. A dispatching switch couples the base station system (BSS) to the plurality of mobile switching centers (MSC) and is responsible for assigning the mobile units to the MSCs. The dispatching switch assigns each mobile unit to an MSC so as to equalize loading among the MSCs and also routes communications between the BSS and the MSCs (Col. 6, lines 7-15). In other words, the dispatching switch determines the loading on the MSCs and assigns mobile units to the appropriate MSC to distribute the load.

The dispatching switch (400) includes a switch-processing core (404) that is equated with the MGWSN of the Applicant's invention. In the Detailed Action, a correspondence is drawn between this claimed feature, the MGWSN, and the switch-processing core, which is described in col. 10, lines 27-48 of the Ho reference. However, the Applicant has reviewed this cited feature of Ho and finds no reference to a media gateway selection node or equivalent. Instead, the cited switch-processing core of Ho is used for assigning mobile units according to the load on the MSCs. Calls and messages are routed between the mobile units and assigned MSCs. (Abstract) Effectively, the dispatching switch determines loading of each of the mobile switching centers and then, based upon the loading, the dispatching switch assigns the mobile

unit to one of the mobile switching centers. There is no teaching of utilizing non-dedicated circuit pathways to connect a BSC to a media gateway and then to a MSC.

In contrast to Ho, which determines loading of MSCs, the MGWSN of the present invention selects media gateways. A media gateway is an edge device and can provide an interface between a packet switched environment and a circuit switched environment (i.e., core network). The MGWSN provides a central means for pooling and controlling circuits in the core network such that no dedicated circuits between the BSCs and MSCs are required. In addition, an individual MSC can be added or removed from the MSC pool without the BSCs being aware. The MGWSN has at its disposal the Media Gateway Selection Database (MGWSDB), which it consults in order to identify an available circuit path between a particular BSC, a selected media gateway and a MSC in the MSC pool. The purpose is to find a circuit pathway that is not being used as opposed to the dispatching switch of Ho that picks a MSC that is not busy so as to balance the load on the MSC pool.

As disclosed in the Applicant's invention, each circuit pathway typically has an associated Circuit Identity Code (CIC) stored in the MGWSDB. The MGWSN selects an available circuit path identified by a unique CIC and also selects a Media Gateway (MGW) and reserves the available CIC. The MGWSN returns the identity of the MGW and the identity of CIC, to the requesting MSC. A connection is made using the available CIC from the requesting MSC to the selected MGW and to the associated BSC. (Page 7-8, para. 23).

The Applicant respectfully submits that the Ho reference does not disclose (directly or inherently) the emphasized limitations in amended claim 13; that of selecting media gateways and then selecting non-dedicated circuits between the gateways and the MSCs, and the gateways and the access nodes to provide a connection between the access node and a MSC. Claims 14-16 depend from claim 13 and contain the same limitations., The Applicant respectfully requests the withdrawal of the rejection of claims 13-16.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 1-12 are rejected under 35 U.S.C § 103(a) as being unpatentable over Ho in view of Stumpert (WO 01/13657, hereinafter Stumpert). The Applicant respectfully traverses the rejection of these claims.

As described above, the Ho reference appears to disclose a system for balancing load by distributing connections among switches (MSC) with a dispatching switch determining which MSC switch to assign a mobile unit. As disclosed in amended claim 1, the Applicant's invention utilizes a media gateway selection node to determine and utilize non-dedicated circuit pathways for connecting a mobile unit to a MSC in a pool. Ho does not teach or suggest the media gateway selection node or the usage of non-dedicated circuit pathways between an access node and a MSC with the media gateway situated between the two.

The Stumpert reference is cited only for teaching a network having at least two gateways. Stumpert appears to disclose a method for separating call control and bearer control signals. Bearer control relates to controlling selection of a path through the transmission network and utilizing the required resources. Call control relates to subscriber and service control. It is respectfully submitted that the Stumpert reference does not address the above-identified deficiencies of Ho with respect to the Applicant's invention. The combination of the Ho and Stumpert references fails to teach a media gateway selection node that chooses and implements non-dedicated circuit pathways between an access node, a media gateway and a switch. In addition, Applicant submits that there is no suggestion or motivation in either Ho or Stumpert to combine the references to teach the claimed invention.

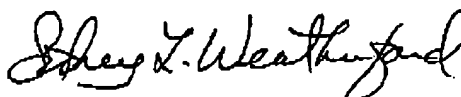
For all of the above reasons, Ho and Stumpert, taken singly or in combination, fail to teach or suggest all of the subject matter of amended claim 1 as required by 35 U.S.C. §103(a). As between claim 1 and the Ho and Stumpert references, the Applicant submits that amended independent claim 8 contains limitations analogous to those found in claim 1. Claims 2 through 7 and 9-12 contain the same limitations as the respective independent claims. For the above given reasons the Applicant respectfully requests that the rejection of claims 1-12 be withdrawn.

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for Claims 1-16.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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